UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,772	02/20/2004	Ioana Donescu	01807.101373.	3762

5514 7590 11/07/2008

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
TURNER, ASHLEY D	
ART UNIT	PAPER NUMBER
2454	
MAIL DATE	DELIVERY MODE
11/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/781,772	DONESCU ET AL.	
	Examiner	Art Unit	
	ASHLEY D. TURNER	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/24/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The Examiner withdraws the rejection of claims 17, 18, and 19 so applicant's arguments are moot.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

The Examiner withdraws the rejection of claims 19 so applicant's arguments are moot.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The Examiner withdraws the rejection of claim 20 so applicant's arguments are moot.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2,3,4,5,6,10,11,12,13,14,15,16,17,18,19,20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Traversat (US 7,136,927 B2) in view of Needham US (6,839 ,769 B2).

Regarding claim 1

Referring to claim 1 Traversat discloses A method of allocating at least one service by a first peer to a second peer (Col. 2 lines13-15 Many peer-to-peer systems are built for delivering a single type of service. For example, Napster provides music file sharing, Gnutella provides generic file sharing, and AIM provides instant messaging. Given the diverse characteristics of these services and the lack of a common underlying P2P infrastructure, each P2P software vendor tends to create incompatible systems--none of them able to interoperate with one another. This means each vendor creates its own P2P user community, duplicating efforts in creating software and system primitives

commonly used by all P2P systems.), the first and second peers being linked by means of a computer communication network, said first and second peers belonging respectively to a first and second group of peers adapted to share data, comprising the steps of (Col. 2 lines 60-67 FIGS. 1A and 1B are examples illustrating the peer-to-peer model. FIG. 1A shows two peer devices 104A and 104B that are currently connected. Either of the two peer devices 104 may serve as a client of or a server to the other device. FIG. 1B shows several peer devices 104 connected over the network 106 in a peer group. In the peer group, any of the peer devices 104 may serve as a client of or a server to any of the other devices): evaluating a distance between said first and second peers; Traversat did not disclose wherein said distance between said first and second peers is a distance in a graphic of peers, and selecting a service allocated by said first peer (E) according to the evaluated distance . The general concept of wherein said distance between said first and second peers is a distance in a graphic of peers, and selecting a service allocated by said first peer (E) according to the evaluated distance is well known in the art as taught by Needham. Needham discloses wherein said distance between said first and second peers is a distance in a graphic of peers, and selecting a service allocated by said first peer (E) according to the evaluated distance . (FIG. 3 is a flow diagram of request propagation limit processing according to an embodiment of the present invention. At block 100, a first network node within a peer to peer network creates a file containing data. At block 102, the first network node creates index information associated with the created file. The index information may assign a unique and hard to guess identifier to the file. At block 104, a network node (initially the first

network node) shares the index information with another network node (e.g., a second node) by sending an index information packet to the other node. At block 106, the distance from creator (DFC) field or distance counter in the index information packet may be incremented or otherwise updated by the second receiving node. At block 108, if further sharing of the index information occurs, processing continues back at block 104. Thus, the index information may be propagated through the network, with the DFC field being updated by each receiving node. Otherwise, at block 110, at any network node having the index information and requesting the file, the request propagation limit in a request packet for the file may be set to the DFC value in the associated index information. The requesting network node may be any node that has received the index information. The requesting node then sends the request packet to one or more other network nodes in the requesting node's social network (e.g., private peer to peer network). Subsequently, at block 112, any network node receiving the request packet forwards the request packet to another network node in its social network only if the request propagation limit has not been reached. If the limit has not been reached, in one embodiment a current number of hops or propagation counter may be incremented or otherwise updated in the request packet prior to forwarding the request packet. In another embodiment, the request propagation limit may be decremented each time the request packet is forwarded, and the request packet may be forwarded only when the request propagation limit is nonzero. If the limit has been reached, the request packet is considered to be "dead" and not forwarded. At block 114, a network node having the file and receiving the request packet may subsequently transfer the requested file to a

requesting network node.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Traversat to include wherein said distance between said first and second peers is a distance in a graphic of peers, and selecting a service allocated by said first peer (E) according to the evaluated distance in order to provide a better level of service, various queue-based recovery schemes have been employed that try to retrieve the photographs when there are failures.

Regarding claim 10

Claim 10 is similarly rejected using at least the same reasoning / citations provided above for claim 1 since they recite the same limitations and are distinguished only by statutory category.

Regarding claim 17

Claim 17 is similarly rejected using at least the same reasoning / citations provided above for claim 1 since they recite the same limitations and are distinguished only by statutory category.

Regarding claim 18

Claim 18 is similarly rejected using at least the same reasoning / citations provided above for claim 1 since they recite the same limitations and are distinguished only by statutory category.

Regarding to claim 2

Referring to claim 2 Traversat and Needham discloses all the limitations of claim 2 which is described above. Traversat also discloses wherein the evaluation step comprises a step of receiving a notification sent by a central server (i.e. the resolver) in said computer communication network (Col. 48 lines 5-17 a resolver service may be implemented on a peer node on a network. Resources may register one or more resource handlers with the resolver service. The resolver service may receive query messages that include resource handler names. The resolver service may determine to which resource implementation a particular query message should be sent given the query message's resource handler name. The resource implementation's resource handler may generate a response message in response to the query message and may send the response message to the sender of the query message. In one embodiment, the resource handler may send the response message to the resolver service. The resolver service may then forward the response message to the sender of the query message). , said notification comprising the value of said distance and an identifier of said second peer on the computer communication network (Col. 49 lines 45-67 Query message 236 may include a credential for peer node 200, a query identifier, a query,

and a handler name that may identify a resource handler. In one embodiment, the query may be a string and may comprise any string that may be interpreted by the targeted resource handler. One or more peer nodes on the network may host particular resource instances 802D, 802E, and 802F. Resource instances 802D, 802E, and 802F may implement resource handlers 804A, 804B, and 804C.

Resolver 800 may receive query message 236. Resolver 800 may determine which resource instance is to receive query message 236. The determination of which of resource instance 802D, 802E, and 802F is to receive the query may be made using one or more of a variety of criteria to determine an optimal resource instance to receive the query using the particular criteria. For example, the resolver service may base the determination on the number of hops on the network between resource instances 802D, 802E, and 802F and peer node 200. As another example, the resolver may base the determination on the current processing loads of each peer node implementing the resource. As another example, the resolver service may base the determination on the physical proximity of resource instances 802D, 802E, and 802F and peer node 200).

Regarding claim 11

Claim 11 is similarly rejected using at least the same reasoning / citations provided above for claim 2 since they recite the same limitations and are distinguished only by statutory category.

Regarding claim 3

Referring to claim 3 Traversat and Needham discloses all the limitations of claim 3 which is described above. Traversat also discloses wherein the evaluation step comprises a step of reading the value of said distance associated with said second peer amongst a list of associations of peers and of distances (Col. 49 lines 45-67 Query message 236 may include a credential for peer node 200, a query identifier, a query, and a handler name that may identify a resource handler. In one embodiment, the query may be a string and may comprise any string that may be interpreted by the targeted resource handler. One or more peer nodes on the network may host particular resource instances 802D, 802E, and 802F. Resource instances 802D, 802E, and 802F may implement resource handlers 804A, 804B, and 804C. Resolver 800 may receive query message 236. Resolver 800 may determine which resource instance is to receive query message 236. The determination of which of resource instance 802D, 802E, and 802F is to receive the query may be made using one or more of a variety of criteria to determine an optimal resource instance to receive the query using the particular criteria. For example, the resolver service may base the determination on the number of hops on the network between resource instances 802D, 802E, and 802F and peer node 200. As another example, the resolver may base the determination on the current processing loads of each peer node implementing the resource. As another example, the resolver

service may base the determination on the physical proximity of resource instances 802D, 802E, and 802F and peer node 200).

Regarding claim 12

Claim 12 is similarly rejected using at least the same reasoning / citations provided above for claim 3 since they recite the same limitations and are distinguished only by statutory category.

Regarding claim 4

Referring to claim 4 Traversat and Needham discloses all the limitations of claim 4 which is described above. Traversat also discloses wherein the evaluation step comprises a step of receiving an electronic ticket i.e. propagate sent by said second peer (Col. 40 lines 16-26When the new peer discovers another peer or peers, it may attempt to discover peer groups. This process may be similar to the peer discovery process described above. The new peer may send (e.g. propagate) another discovery message that is configured to discover peer groups. Peers in the proximity network (region) that are aware of a peer group or peer groups may respond to the peer group discovery message, and may return information on the peer group(s) (e.g. peer group advertisements) of which they are aware. The new peer may use this information to

determine a peer group or peer groups that it may be interested in joining.) comprising an identifier of said second peer and the distance between the first and second peer(Col. 49 lines 45-67 Query message 236 may include a credential for peer node 200, a query identifier, a query, and a handler name that may identify a resource handler. In one embodiment, the query may be a string and may comprise any string that may be interpreted by the targeted resource handler. One or more peer nodes on the network may host particular resource instances 802D, 802E, and 802F. Resource instances 802D, 802E, and 802F may implement resource handlers 804A, 804B, and 804C).

Regarding claim 13

Claim 13 is similarly rejected using at least the same reasoning / citations provided above for claim 4 since they recite the same limitations and are distinguished only by statutory category.

Regarding to claim 5

Referring to claim 5 Traversat and Needham discloses all the limitations of claim 5 which is described above. Traversat also discloses wherein, at the step of selecting a service, said service is chosen from amongst a set of associations i.e. peer nodes consisting of a service and a

distance (Col. 12 lines 13 -25In one embodiment the peer-to-peer platform may enable peers to find content that is closest to them. This content may include data (e.g. files) or even services and applications. For example, if a peer node in an office peer-to-peer network using the peer-to-peer platform is moved, the peer-to-peer platform may allow the peer to automatically locate content (e.g. using a discovery service that participates in the discovery protocol) including services (e.g. a printer service and an email service) hosted by other peers closest to the peer's new location, without requiring any manual reconfiguration. Further, at least some content may be copied or moved to the peer in its new location and/or to other peers proximate to the new location).

Regarding claim 14

Claim 14 is similarly rejected using at least the same reasoning / citations provided above for claim 5 since they recite the same limitations and are distinguished only by statutory category.

Regarding claim 6

Referring to claim 6 Traversat and Needham discloses all the limitations of claim 6 which is described above. Traversat also discloses wherein said set of associations is bounded by a threshold value. (Col.44 lines 51-59 In one embodiment, a discovery query message may be used to send a discovery request to find advertisements (e.g. for peers or peer groups). The discovery query may be sent as a query string (attribute,

value) form. A null query string may be sent to match any results. A threshold value may be included to indicate the maximum number of matches requested by a peer. The following is an example of one embodiment of a discovery query message in XML, and is not intended to be limiting).

Regarding claim 15

Referring to claim 15 Traversat and Needham discloses further comprising: a microprocessor; a read only memory adapted to store a service allocation program and a random access memory comprising registers adapted o store variables during the execution of a said program. (Col. 72 lines 33-43 various embodiments may further include receiving, sending or storing instructions and/or data implemented in accordance with the foregoing description upon a carrier medium. Generally speaking, a carrier medium may include storage media or memory media such as magnetic or optical media, e.g., disk or CD-ROM, volatile or non-volatile media such as RAM (e.g. SDRAM, DDR SDRAM, RDRAM, SRAM, etc.), ROM, etc. as well as transmission media or signals such as electrical, electromagnetic, or digital signals, conveyed via a communication medium such as network and/or a wireless link).

Regarding claim 16

Referring to claim 16 Traversat and Needham discloses wherein the device is incorporated in a terminal in a computer communication network. (Col. 2 lines 60- 67 FIGS. 1A and 1B are

examples illustrating the peer-to-peer model. FIG. 1A shows two peer devices 104A and 104B that are currently connected. Either of the two peer devices 104 may serve as a client of or a server to the other device. FIG. 1B shows several peer devices 104 connected over the network 106 in a peer group. In the peer group, any of the peer devices 104 may serve as a client of or a server to any of the other devices).

Regarding claim 20

Referring to claim 20 Traversat discloses a computer readable storage medium on which is stored a computer –executable program that, when executed by a computer, performs a method of allocating at least one service by a first peer to a second peer, the first and second peers being linked by means of a computer communication network, said first and second peers belonging respectively to a first and second group of peers adapted to share data, program comprising the steps of: evaluating a distance between said first and second peers, selecting by said first peer a service supplied by said first peer, said service being selected according to the evaluated distance; and allocating said selected service to said second peer. (Col. 72 lines 33-43 various embodiments may further include receiving, sending or storing instructions and/or data implemented in accordance with the foregoing description upon a carrier medium. Generally speaking, a carrier medium may include storage media or memory media such as magnetic or optical media, e.g., disk or CD-ROM, volatile or non-volatile media such as RAM (e.g. SDRAM, DDR SDRAM, RDRAM, SRAM, etc.), ROM, etc. as well as transmission media or signals such

as electrical, electromagnetic, or digital signals, conveyed via a communication medium such as network and/or a wireless link.) And (Claim 22 a processor; a port operable to couple the peer node to a network; a memory operable to store program instructions, wherein the program instructions are executable by the processor to: receive a query message from a peer node on the network, wherein the query message is formatted in accordance with a peer resolver protocol, wherein the query message indicates a request to a resource implemented by one or more other peer nodes on the network; determine a particular instance of the resource on a particular one of the one or more other peer nodes; forward the query message to the determined resource instance). Traversat did not disclose wherein said distance between said first and second peers is a distance in a graphic of peers. The general concept of wherein said distance between said first and second peers is a distance in a graphic of peers; is disclosed by Needham. Needham discloses wherein said distance between said first and second peers is a distance in a graphic of peers; (FIG. 3 is a flow diagram of request propagation limit processing according to an embodiment of the present invention. At block 100, a first network node within a peer to peer network creates a file containing data. At block 102, the first network node creates index information associated with the created file. The index information may assign a unique and hard to guess identifier to the file. At block 104, a network node (initially the first network node) shares the index information with another network node (e.g., a second node) by sending an index information packet to the other node. At block 106, the distance from creator (DFC) field or distance counter in the index information packet may be incremented or otherwise updated by the second receiving node. At block 108, if further sharing of the index information occurs, processing continues back at block 104. Thus, the index information may be propagated through

the network, with the DFC field being updated by each receiving node. Otherwise, at block 110, at any network node having the index information and requesting the file, the request propagation limit in a request packet for the file may be set to the DFC value in the associated index information. The requesting network node may be any node that has received the index information. The requesting node then sends the request packet to one or more other network nodes in the requesting node's social network (e.g., private peer to peer network). Subsequently, at block 112, any network node receiving the request packet forwards the request packet to another network node in its social network only if the request propagation limit has not been reached. If the limit has not been reached, in one embodiment a current number of hops or propagation counter may be incremented or otherwise updated in the request packet prior to forwarding the request packet. In another embodiment, the request propagation limit may be decremented each time the request packet is forwarded, and the request packet may be forwarded only when the request propagation limit is nonzero. If the limit has been reached, the request packet is considered to be "dead" and not forwarded. At block 114, a network node having the file and receiving the request packet may subsequently transfer the requested file to a requesting network node.) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Traversat to include wherein said distance between said first and second peers is a distance in a graphic of peers, in order to provide a better level of service, various queue-based recovery schemes have been employed that try to retrieve the photographs when there are failures.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Traversat (US 7,136,927 B2) in view of Needham (US 6,839,769 B2) further in view of Rodriguez (US 7,154,621 B2) further in view of Goertzen (US 2002/0141499 A1).

Regarding claim 7

Referring to claim 7 Traversat and Needham discloses all the limitations of claim 7 which is described above. Traversat did not disclose wherein the shared data can be represented at several resolution levels. The general concept of the shared data can be represented at several resolution levels is well known in the art as taught by Rodriguez. Rodriguez discloses the shared data can be represented at several resolution levels (Col. 8 lines 20- 30 The scan center converts the photographs from film to digital representations at a maximum resolution of typically 1536-by-1024 pixels. Full-size digital images are maintained in a Joint Experts Group (JPEG) format. The digital images have an aspect ration of 3.2. Later, these full-size images may be transformed down to lower Resolutions for purposes of speedy delivery across the Internet. Currently, the

Internet-shared individual images have a resolution of 460-by306, whereas the Internet-shared display of a roll of pictures is represented by a group of images having a 96-by-64 resolution). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Traversat to include the shared data can be represented at several resolution levels in order to provide a better level of service, various queue-based recovery schemes have been employed that try to retrieve the photographs when there are failures.

Traversat and Rodriguez did not disclose and said services allocated correspond to various resolution levels of the data to be shared between a first group and a second group of peers. The General concept of services allocated correspond to various resolution levels of the data to be shared between a first group and a second group of peers is well known in the art as taught by Goertzen. Goertzen discloses services allocated correspond to various resolution levels of the data to be shared between a first group and a second group of peers (Pg. 4 paragraph [0033] For example, the input motion image data stream may be decomposed in the decomposition module by splitting each frame of motion image stream into its respective color components. The FPGA which may be dynamically reprogrammable FPGAs would be programmed as a multiplexor/router receiving the three streams of motion image information (One for red, one for green and one for blue in this example) and pass that information to the compression module. Although field gate programmable arrays are described other signal/data distributors may be used.. A distributor may distribute the signal on a peer to peer basis using token passing or the distributor may be centrally controlled and distribute signals separately or the distributor may provide the entire motion image input signal to each module masking the portion which the

module is not supposed to process. The compression module which is made up of multiple compression units each of which is capable of compressing the incoming stream would then compress the stream and output the compressed data preferably to memory. The compression module of the preferred embodiment employs wavelet compression using sub-band coding on the stream in both space and time. The compression module is further equipped to provide a varying degree of compression with a guaranteed level of signal quality based upon a control signal sent to the compression module from the processor. As such, the compression module produces a compressed signal which upon decompression maintains a set resolution over all frequencies for the sequence of images in the digital motion image stream). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Traversat in order to improve the quality of service in peer-to peer systems

Regarding claim 8

Referring to claim 8 Traversat, Needham, and Rodriguez discloses all the limitations of claim 8 which is described above. Traversat did not disclose wherein the shared data are digital images. The general concept of the shared data are digital images is well known in the art as taught by Goertzen. Goertzen discloses wherein the shared data are digital images (Paragraph [0044] [0044] FIG. 6 is a block diagram showing one example of a digital motion image system chip 600. The chip is provided with a first DMR 610 followed by an FPGA 620, followed by a pair of DMRs 630A-B which are each coupled to a second FPGA 640A-B. The FPGAs are in turn coupled to each of four CODECs 650A-H. As was previously stated the FPGAs may be

programmed depending upon the desired throughput. For example in FIG. 7A the first FPGA 620 has been set so that it is coupled between the first DMR 610 and the second DMR 630A. The second DMR 630A is coupled to an FPGA 640A which is coupled to three CODECs 650A, 650B, 650C. Such a configuration may be used to divide the incoming digital image stream into frames in the first DMR and then decorrelate the color components for each frame in the second DMR. The CODECs in this embodiment compresses the data for one color component for each motion image frame. FIG. 7B is an alternative configuration for the digital motion image system chip of FIG. 6. In the configuration of FIG. 7B the first FPGA 620 is set so that it is coupled to each of two DMRs 630A, 630B at its output. Each DMR 630A,B then sends data to a single CODEC 650A, E. This configuration may be used first to interlace the motion image frames such that the second DMRs receive either an odd or even field. The second DMRs may then perform color correction or a color space transformation on the interlaced digital motion image frame and then this data is passed to a single CODEC which compresses and encodes the color corrected interlaced digital motion image). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Traversat in order to improve the quality of service in peer-to peer systems.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Traversat (US 7,136,927 B2) in view of Needham (US 6,839,769 B2) Eschbach (US 6,628,843 B1) further in view of Goertzen (US 2002/0141499 A1).

Regarding claim 9

Referring to claim 9 Traversat and Needham discloses all the limitations of claim 9 which is described above. Traversat did not disclose wherein the shared data are compressed digital images to the JEP 200format and said services allocated correspond to various levels of visual quality of data to be shared between a first and second group of peers. The general concept of wherein the shared data are compressed digital images to the JEP 200 format is well known in the art as taught by Eschbach. Eschbach discloses wherein the shared data are compressed digital images to the JEP 2000 format (Col. 2 line 63 –Col 3. line12 In accordance with a first aspect of the present invention, a method of processing JPEG compressed image data comprises: (i) receiving JPEG compressed image data that represent an input digital image, the JPEG compressed image data including a plurality of DC components; (ii) extracting a plurality of the DC components from the JPEG compressed image data; (iii) inputting at least some of the extracted DC components to an automated image enhancement system; (iv) using the DC components input to the automated image enhancement system to derive a final correction tone reproduction curve and/or a sharpness filter for enhancement of the input digital image represented by the JPEG compressed data; (v) decompressing the JPEG compressed image data to obtain decompressed image data that represent the input digital image; and, (vi) using the final tone reproduction curve and/or the sharpness filter to enhance the decompressed image data). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Traversat in order to increase the speed of image processing while maintaining low memory requirements.

Traversat and Eschbach did not disclose said services allocated correspond to various resolution levels of the data to be shared between a first group and a second group of peers. The General concept of services allocated correspond to various resolution levels of the data to be shared between a first group and a second group of peers is well known in the art as taught by Goertzen. Goertzen discloses services allocated correspond to various resolution levels of the data to be shared between a first group and a second group of peers (Pg. 4 paragraph [0033] For example, the input motion image data stream may be decomposed in the decomposition module by splitting each frame of motion image stream into its respective color components. The FPGA which may be dynamically reprogrammable FPGAs would be programmed as a multiplexor/router receiving the three streams of motion image information (One for red, one for green and one for blue in this example) and pass that information to the compression module. Although field gate programmable arrays are described other signal/data distributors may be used.. A distributor may distribute the signal on a peer to peer basis using token passing or the distributor may be centrally controlled and distribute signals separately or the distributor may provide the entire motion image input signal to each module masking the portion which the module is not supposed to process. The compression module which is made up of multiple compression units each of which is capable of compressing the incoming stream would then compress the stream and output the compressed data preferably to memory. The compression module of the preferred embodiment employs wavelet compression using sub-band coding on the stream in both space and time. The compression module is further equipped to provide a varying degree of compression with a guaranteed level of signal quality based upon a control

signal sent to the compression module from the processor. As such, the compression module produces a compressed signal which upon decompression maintains a set resolution over all frequencies for the sequence of images in the digital motion image stream). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Traversat in order to improve the quality of service in peer-to peer systems

Response to Arguments

Applicant's arguments filed on 7/11/2008 have been fully considered but they are deemed moot in view of the new grounds of rejections.

Conclusion

Arguments are deemed moot in view of the new grounds of rejection necessitated by the amendment.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashley D. Turner whose telephone number is 571-270-1603. The examiner can normally be reached on Monday thru Friday 7:30a.m.- 5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ashley D Turner
Examiner
Art Unit 2154

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2454